

11  
13  
**AMENDED CLAIMS**

[received by the International Bureau on 15 March 2004 (15.03.2004);  
original claims 1, 7 and 9 amended; remaining claims unchanged (2 pages)]

1. A data processing system 10 comprising a server 12 for processing a software application enabling interaction among multiple users sharing a virtual environment 20 represented geographically as a plurality of cells 22, each user being represented at a virtual location in said environment, and a plurality of user-interface apparatus 14 each for receiving state data relating to said environment from said server via a plurality of channels, wherein each cell 22 is associated with one of said channels, and at least one of said user-interface apparatus 14 is operable to tune to one of said channels so as to receive the channel associated with the cell in which the respective user's representation is located.
2. A system according to claim 1, wherein at least some of said cells overlap with adjacent cells.
3. A system according to claim 1 or 2, wherein said cells are arranged in a 2-D row and column matrix formation.
4. A system according to claim 3, wherein said cells are arranged in a first and a second matrix 32,37 such that a cell in the first matrix overlies four cells in the second matrix.
5. A system according to any preceding claim, wherein more than one of said cells 22 are associated with one of said channels.
6. A system according to claim 5, wherein said at least one user-interface apparatus is operable to disregard the remaining cells associated with that channel.
7. Interactivity apparatus 14 for use with a remote server-based multiple user application in which the users share a virtual environment 20 represented

Article 19

12/14

geographically as a plurality of cells 22 and are each represented at a virtual location in said environment, the apparatus operable to communicate with the server via a plurality of channels, wherein each cell is associated with one of said channels, and the apparatus further comprises receiving means 18 operable to tune to one of said channels so as to receive the channel associated with the cell in which the respective user's representation is located.

8. A mobile phone device comprising the apparatus of claim 7.

9. A method of processing data for a multiple user application in which the users share a virtual environment 20 represented geographically as a plurality of cells 22, the method comprising the steps of:

- representing a user at a virtual location in said environment;
- transmitting a plurality of channels, wherein each cell is associated with one of said channels and each channel conveys information relating to its respective associated cells; and,
- tuning to one of said channels so as to receive the channel associated with the cell comprising said virtual location.

10. A method according to claim 9 further comprising the steps of:

- detecting the direction of movement of said user's representation; and,
- receiving another one of said channels which is associated with a neighbouring cell to that cell comprising said virtual location in accordance with said detected direction.

11. A computer program for carrying out the method of claim 9 or claim 10.